From: Cynthia Caporale/ESC/R3/USEPA/US

Sent: 3/16/2012 4:59:15 PM

To: Ex. 4 - CBI

CC: John Gilbert/CI/USEPA/US@EPA; Kelley Chase/R3/USEPA/US@EPA

Subject: RE: EXTERNAL: Re: Verification/Completeness Check for R3 (WO1202015 PART # Posted Feb 29 and R3

(WO1202001 PART 3 Posted Mar 01)

I concur.

Cynthia Caporale, Chief OASQA Laboratory Branch U.S. EPA Region III Environmental Science Center Fort Meade, MD (410) 305-2732 Fax: (410) 305-3095

From: Ex. 4 - CBI

To: Cynthia Caporale/ESC/R3/USEPA/US@EPA

Cc: John Gilbert/CI/USEPA/US@EPA, Kelley Chase/R3/USEPA/US@EPA

Date: 03/16/2012 04:37 PM

Subject: RE: EXTERNAL: Re: Verification/Completeness Check for R3 (WO1202015 PART # Posted Feb 29 and R3 (WO1202001 PART 3 Posted Mar 01)

Cindy,

I just spoke with Kelley and I presented your second option to #2......raising the RLs to 12 mg/L for TDS and then flagging anything between 12 and 120 mg/L with a "J". I told her you would be more comfortable with this option and it would not require an additional qualifier. It is not typically how the NFG qualifies but seems to be a viable option. So that is the way we are going to go...

Ex. 4 - CBI

From: Ex. 4 - CBI

Sent: Friday, March 16, 2012 4:12 PM

To: 'Kelley Chase'

Cc: John Gilbert; 'Cynthia Caporale'; Ex. 4 - CBI

Subject: RE: EXTERNAL: Re: Verification/Completeness Check for R3 (WO1202015 PART # Posted Feb 29 and R3

(WO1202001 PART 3 Posted Mar 01)

Hi Kelley,

I spoke with Cindy this afternoon and these are her concerns with respect to Item #2.

- 1. Is the toxicologist receiving the results reported by the lab in addition to the corresponding method and field blanks for their assessment?
- 2. Cindy feels that the qualifier "J+" needs more of an explanation. "J+" in the National Functional Guidelines is defined as "The result is an estimated quantity, but the result may be biased high." Cindy thinks the explanation should be expanded to include that the MB contained 12 mg/L and any results within 10x that number are flagged J*.
- 3. Cindy would like to raise the RL for sample HW26-P from 10U to 12U to err more on the conservative side since the method blank contained 12 mg/L.

Ex. 4 - CBI

From: Kelley Chase [mailto:Chase.Kelley@epamail.epa.gov]

Sent: Friday, March 16, 2012 10:35 AM

To Ex. 4 - CBI

Cc: John Gilbert

Subject: EXTERNAL: Re: Verification/Completeness Check for R3 (WO1202015 PART # Posted Feb 29 and R3

(WO1202001 PART 3 Posted Mar 01)

Ex. 4 - CBI

Per Cindy's response - it looks like there needs to be more discussion regarding # 2. Not sure if you can handle this if you can handle this via e-mail? If not - perhaps you can call Cindy to discuss. I am available - if you would like me on the phone. However - I am fine with you handling between the two of you as long as it is clear in a follow-up e-mail on how this is resolved. Also - I am really hoping that we can reach a resolution today so that Scott can get the final qualifiers into Scribe and I can get the final data to our tox.

Thanks again for all your help!

- Kelley

| From: , | Cvnthia Canorale/ESC/R3/USEP | A/J.IS | | |
|----------|-------------------------------|------------------------|---|---------|
| To: | Ex. 4 - CBI | | | |
| Cc: [| Ex. 4 - CBI | , | rt/CI/USEPA/US@EPA, John Gilbert/CI/USEPA/US@EPA, Kelley | y |
| Chase/R | 3/USEPA/US@EPA, | Ex. 4 - CBI | >, Sella Burchette/ERT/R2/USEPA/US@EPA, Robin | |
| Costas/E | SC/R3/USEPA/US@Ėr∕a· | | | |
| Date: | 03/16/2012 10:20 AM | | | |
| Subject: | Re: Verification/Completeness | Check for R3 (WO120201 | 15 PART # Posted Feb 29 and R3 (WO1202001 PART 3 Posted N | Mar 01) |

The report on the Dimock Verification/Completeness Check for file 1201015 FINAL Part 3 of 3 R33907 02 28 12 1443.pdf was reviewed and below are the responses for your consideration.

NOTE: #2 below might need discussion.

File 1201015 FINAL PART 3 of 3 R33907 02 28 12 1443.pdf

1. The case narrative for total phosphorus states that the matrix spike recovery results were outside of criteria for sample 1201015-18 (HW35-F). The sample spiked was actually 1201015-19 (HW20). This appears to be a typographical error and needs to be revised. The result qualifier in Scribe for HW20 should be "UJ".

Response: Correct. The batch number was listed incorrectly in the narrative. Sample 1201015-19 was spiked and the result qualifier should be "UJ".

2. The equipment blank (EB01) was used to qualify sample data. Since it cannot be determined what samples are associated with this equipment blank, the sample qualifiers should be based on the respective method and field blanks only. The following qualifiers are recommended for the TDS analysis based on the results of the method blank (for all samples) and FB06 (for samples HW18, HW13, HW18-P, HW25-P, HW20 and HW20-P): For samples EB01, FB06, HW13, HW18-P, HW25-P, HW35, HW20, HW20-P, HW32, HW32-P and HW52, a qualifier of "J+" indicating that the results are estimated high should be entered into the results qualifier column in Scribe. For samples HW18, HW26-P, HW26, HW33, HW33a-P and HW33b-P that were flagged with a "B" by the laboratory, no qualifiers should be entered into the result qualifier column in Scribe since these results were either non-detect, the concentrations were greater than 10X the blank concentrations and were associated with field blanks that were non-detect.

Response: Qualifying the samples that have results <10X the TDS value in FB06 as estimated high (J+) is not recommended, unless an explanation in the final report includes the values of method blank, etc. Elevating the reporting limit to the value present in the sample and qualifying non-detect (U) would be preferred since the J+ qualifier does not provide enough indication of the amount of blank contamination. For example, HW13 has a TDS result of 15 mg/L. Using the J+ qualifier does not seem to provide enough information about the level found in FB06 and method blank.

Since TDS was reported for the method blank and field blank (12 mg/L and 13 mg/L, respectively) and the EB01 was reported

as 19 mg/L (statistically close to the other blank values), the contamination is most likely due to the method blank; therefore, not applying the EB01 result to this batch of samples is deemed appropriate. (Four samples are affected by this approach.)

3. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

Response: All required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPS unless otherwise noted in the narrative.

4. This reviewer agrees with the lab qualifier of "J" assigned to sample HW35 for the TDS RPD exceeding the criterion; however, this qualifier is overridden by the "J+" qualifier assigned to this sample in item #2 above. Since the NFG would typically assign qualifiers to the whole batch, professional judgment is being used to only qualify the sample that was analyzed in duplicate. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch.

Response: Sample HW35 was analyzed as a laboratory duplicate and the RPD was outside of the acceptance criteria. The reference quality control sample was within acceptable range. Since samples within a batch for this project are collected in varied locations the recommendation is to only qualify the associated sample (HW35); agree that similarity of samples within a batch cannot be ascertained. The duplicate RPD from another batch was successful demonstrating overall lab precision was in control.

5. This reviewer agrees with the lab qualifier of "J" assigned to sample HW35 for the nitrate/nitrite matrix spike exceeding the criterion. Since the NFG typically assigns qualifiers to the whole batch, professional judgment is being used to only qualify the sample spiked. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW35 for nitrate/nitrite, a "J" qualifier should be entered in the result qualifier column in Scribe.

Response: Since samples within a batch for this project are collected in varied locations the recommendation is to only qualify the associated sample (HW35); agree that similarity of samples within a batch cannot be ascertained. Note: This is the same sample that did not meet acceptance criteria when analyzed in duplicate for TDS.

6. The LCS for oil and grease for Batch BB21403 was recovered at 137% outside of the 78-114% criterion. No qualification of the data for the samples associated with this batch is necessary.

Response: Agree.

The report on the Dimock Verification/Completeness Check for file 1202001 FINAL Part 3 of 3 R33907 03 01 12 1408.pdf was reviewed and below are the responses for your consideration.

File 1202001 FINAL PART 3 of 3 R33907 03 01 12 1408.pdf

1. This reviewer agrees with the lab qualifier of "J" assigned to sample HW09 for the nitrate/nitrite matrix spike exceeding the 85-115% criterion. Since the NFG typically assigns qualifiers to the whole batch, professional judgment is being used to only qualify the sample spiked. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW09 for nitrate/nitrite, a "J" qualifier should be entered in the result qualifier column in Scribe.

Response: Since samples within a batch for this project are collected in varied locations, the recommendation is to only qualify the associated sample (HW09); agree that similarity of samples within a batch cannot be ascertained.

2. This reviewer agrees with the lab qualifier of "J" assigned to sample HW42z for the total nitrogen RPD exceeding the 20% criterion. Since the NFG would typically assign qualifiers to the whole batch, professional judgment is being used to only qualify the sample that was analyzed in duplicate. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW42z for total nitrogen, a "J" qualifier should be entered into the result column in Scribe.

Response: Since samples within a batch for this project are collected in varied locations, the recommendation is to only qualify the associated sample (HW42z); agree that similarity of samples within a batch cannot be ascertained.

3. This reviewer agrees with the lab qualifier of "UJ" assigned to samples HW42, HW46, HW46-P, FB09, FB08, HW34a, HW42z, HW34a-P, HW28a and HW28a-P for the oil and grease MRL exceeding the 60-140% criterion. Since this method is gravimetric, it is not possible to elevate the reporting limit to the next standard. For samples HW42, HW46, HW46-P, FB09, FB08, HW34a, HW42z, HW34a-P, HW28a and HW28a-P for oil and grease, a "UJ" qualifier should be entered in the result qualifier column in Scribe.

Response: Agree.

Cynthia Caporale, Chief OASQA Laboratory Branch U.S. EPA Region III Environmental Science Center Fort Meade, MD (410) 305-2732 Fax: (410) 305-3095

From: Ex. 4 - CBI

To: Cynthia Caporale/ESC/R3/USEPA/US@EPA, Kelley Chase/R3/USEPA/US@EPA

Co: John Gilbert/Cl/USEPA/US@EPA, Gary Newhart/Cl/USEPA/US@EPA, Sella Burchette/ERT/R2/USEPA/US@EPA, Ex. 4 - CBI

Date: 03/07/2012 03:48 PM

Subject: Verification/Completeness Check for R3 (WO1202015 PART # Posted Feb 29 and R3 (WO1202001 PART 3 Posted Mar 01)

Good Afternoon to All:

I consolidated the comments and recommendations for qualifications in one memo in the interest of reducing the e-mails. The qualifications are in "Red" and are ready for Scott once a response is received. Let me know if everyone is OK with this. Thanks.

Ex. 4 - CBI

Lockneea Wartin

Scientific, Engineering, Response and Analytical Services (SERAS)

Ex. 4 - CBI

[attachment "SERAS-172-DSR-030712_16.docx" deleted by Cynthia Caporale/ESC/R3/USEPA/US]